

## PROPOSAL EVALUATION

### *Proposition 84 Integrated Regional Water Management (IRWM) Grant Program*

#### *Implementation Grant, Round 1, FY 2010-2011*

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<b>Applicant</b>	Monterey Peninsula Water Management District	<b>Amount Requested</b>	\$ 6,127,286
<b>Proposal Title</b>	Monterey Peninsula, Carmel Bay, and South Monterey Bay Integrated Regional Water Management Plan Project Implementation, Phase 1	<b>Total Proposal Cost</b>	\$ 25,014,495

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#### PROPOSAL SUMMARY

The Proposal consists of seven projects: (1) Lower Carmel River Restoration and Floodplain Enhancement, (2) Seaside Groundwater Basin Aquifer Storage and Recovery Project, (3) Sanitary Sewer System Repair in Monterey and Pacific Grove, (4) Implementation of Solid Waste Removal Technology, (5) Carmel River Watershed Volunteer Program, (6) Microbial Source Tracking in the Cities of Monterey and Pacific Grove, and (7) Carmel River Lagoon and Beach Studies.

#### PROPOSAL SCORE

Criteria	Score/ Points Possible	Criteria	Score/ Points Possible
Work Plan	6/15	Economic Analysis – Water Supply Costs and Benefits	12/15
Budget	2/5	Water Quality and Other Expected Benefits	6/15
Schedule	3/5	Economic Analysis – Flood Damage Reduction	3/15
Monitoring, Assessment, and Performance Measures	4/5	Program Preferences	8/10
Total Score (max. possible = 85)			44

#### EVALUATION SUMMARY

The following is a review summary of the proposal.

##### Work Plan

The criterion is less than fully addressed and documentation or rationale is incomplete and insufficient. The work plan provides background information for each of the projects to demonstrate the need and purpose. However, the work plan and associated project tasks are not sufficiently detailed and do not include the appropriate work items. These efforts should have been developed further to demonstrate feasibility for the implementation of these projects. The work plan does not clearly discuss the role of the Monterey Peninsula Water Management District (MPWMD) as the overall IRWM grant administrator and the responsibilities and coordination with the project implementers (i.e., reporting, invoicing, day to day contact with DWR). The plans and specifications are not included in the application package, and the

submitted scientific and technical information does not sufficiently support the feasibility of the proposal. For example, for Project 1, the project proponent is unclear, work plan is missing submittals such as invoices or reporting documents, details on status of CEQA is missing, and plans and specs are future tasks; Project 2 work plan is missing submittals, non-construction tasks such as environmental documentation are lacking from the work plan; Project 3 work plan indicates the project is ready to proceed, but documents that would support the claimed state of environmental documentation and final design are not included; and Project 5 is unclear as to the project proponent and work item submittals are missing

## **Budget**

Less than the half of the project budgets in the proposal have detailed cost information. Many of the costs cannot be verified as reasonable. Summary budgets do not adequately document detailed budgets for each project. The items shown in the budget do not generally agree with the work items shown in the work plan and schedule. The proposal does not provide a satisfactory explanation of how the project costs were estimated. Many project budgets identify a contingency amount but an explanation or rationale for how the contingency amount was determined is not provided.

## **Schedule**

The schedule is not entirely consistent and reasonable. The Proposal does not contain a detailed and specific schedule that adequately documents the projects. The schedules are not entirely consistent with the work plan or budget tasks; therefore, the readiness of the projects based on the schedules is difficult to determine. For example, Project 2's schedule presents what appears to be a subtask, "complete SMS-1 well foundation", at the task level. There is also no explanation for this activity and the budget for this task listed as "NA".

## **Monitoring, Assessment, and Performance Measures**

The criterion is fully addressed, but not supported by thorough and well-presented documentation and logical rationale. The proposal includes the project performance measures for each project including projects goals, desired outcomes, output indicators, outcome indicators, measurement tools and methods, and target. However, each project was presented in a different format. Some included a performance table, some provided a narrative approach. A table format was requested in the proposal solicitation package (PSP). For Project 6, the output and outcome indicators are unclear.

## **Economic Analysis – Water Supply Costs and Benefits**

High levels of benefits relative to costs can be realized through this proposal; however, the quality of the analysis is moderate and supporting documentation is partially substantiated. Monetized water supply benefits claimed are \$129.713 million (M). Most of these benefits are provided by the Project 2 (\$111.764 M) with the remainder by Project 1 (\$17.949 M).

Project 2 would provide 2,000 acre-feet per year (AFY) of new supply in a region where new demand and reduced supply has resulted in an expected need of 12,500 AF (p. 3-18). The value of new water is based on cost of desalination at \$5,600 per AFY. This source shows \$5,600 as the "First Year Plant Cost, \$/AFY", making it incorrect to use as a long-term cost of water. The region treats up to 25,000 AFY of wastewater annually (p. 3-19). Wastewater might be treated, recharged to groundwater, and pumped for agriculture in lieu of surface water. Transfers from agriculture, perhaps purchase and retirement of irrigated land, might also be less expensive. Conservation could play a role. However, it is not clear that these other sources

would provide enough water to meet the 12,500 AF need, so desalination could be the marginal supply source avoided.

The analysis incorrectly subtracts the cost of the ASR water (\$897) from \$5,600 to obtain a unit benefit of \$4,703 per AF and a total benefit of \$111.764 M. If desalination or reclamation cost about \$2,000 per AFY, then benefits of the ASR project are about \$48 M  $(2000/4703)*112$ .

Project 7 would plan and build a protective barrier along the north side of the Carmel River lagoon. Benefits are based on the increased amount of freshwater storage provided, 259 AF. This benefit seems inappropriate because the 259 AF would not be provided by some other means in the absence of the project, and the water stored in the lagoon would not be used for water supply.

### **Water Quality and Other Expected Benefits**

Only average levels of benefits can be realized through this proposal; however, the quality of the analysis is partially lacking and supporting documentation is partially unsubstantiated. Monetized water quality and other benefits claimed are \$6.09 M. Most of these benefits are provided by Project 7 (\$5.93 M). Benefits are based on reduced mortality of 300 young steelhead trout each year at a value of \$1,600 per fish. The text notes that the US Fish and Wildlife Service (USFWS) have valued a steelhead at \$25,000. The value of smolts is far less than the value of an adult because about 1% survive in the ocean.

### **Economic Analysis – Flood Damage Reduction**

Only low levels of benefits relative to costs can be realized through this proposal, as demonstrated by the analysis and supporting documentation. Monetized flood damage reduction benefits claimed are \$3.07 M, Project 1 (\$1.71 M) and Project 7 (\$1.35 M). The source of the first benefit estimate is not clear from the text or tables. Project 7 benefits are based on event residential damages observed in recent years of \$300,000 at 0.04, 0.02 and 0.10 exceedance levels which are completely avoided (0 chance of failure) with project.

### **Program Preferences**

The Proposal demonstrates with a significant degree of certainty that seven projects will collectively implement eight Program Preferences including: Effectively integrate water management programs and projects within hydrologic region; Drought preparedness, Use and reuse water more efficiently, Climate change response actions, Expand environmental stewardship, Practice integrated flood management, Protect surface water and groundwater quality, and Ensure equitable distribution of benefits. However, the proposal does not address a critical water supply or water quality needs of a Disadvantaged Community in the region.